IN THE DRAWINGS:

Please replace the drawing sheet with FIGURE 5 with the attached replacement sheet.

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. Applicant has amended Claims 1, 11, 15, and 16, and respectfully submits that no new matter has been added by these amendments. Thus, Claims 1-23 remain pending in this application. This application has been carefully reviewed in light of the Official Action mailed October 21, 2005. Applicant respectfully requests reconsideration and favorable action in this case.

Drawing Objections

The drawings stand objected to as failing to comply with 37 C.F.R. § 1.84(p)(5). A Replacement Sheet of Drawings is attached hereto. Referring to FIG. 5, labels 51-53, 61-63 and 65 have been inserted. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 112

Claims 1, 11, 15, and 16 stand rejected under 35 U.S.C. § 112, second paragraph. For having insufficient antecedent basis. As amended above, Claim 1 now recites the phrase "in the sequence in which blocks of data corresponding to multiple threads are stored on the sequential storage device" instead of the phrase "in the sequence of blocks of data stored on the sequential device." Claim 11 now recites the phrase "the multiple write threads" instead of the phrase "multiple write threads." Claim 15 now recites the phrases "the position of entries in the log corresponding to the identified portion of the blocks of data" and "the blocks of data corresponding to one of the threads in the sequence of blocks of data stored on the sequential storage device" instead of the phrases "the position of entries corresponding to the identified portion of the blocks of data in the log" and "the blocks of data in the sequence of blocks of data stored on the sequential device." Claim 16 now recites the phrase "the multiple threads" instead of the phrase "multiple threads" in lines 5 and 10. Claims 1, 11, 15 and 16 as amended now have antecedent basis. Therefore, Applicant therefore respectfully requests the Examiner withdraw the rejection.

Rejections under 35 U.S.C. § 103

Claims 1-10 and 23 stand rejected as obvious over U.S. Publication No. 2004/0243736 ("Hattrup") in view of U.S. Patent No. 6,892,199 ("Hong "). Claims 11-22 stand rejected as obvious over Hong in view of Hattrup.

Hattrup Not Available as a Reference

Applicants respectfully submit that Hattrup is not prior art under 35 U.S.C. 102(e). Applicant invented the subject matter of rejected Claims 1-23 prior to the effective date of Hattrup. The effective date of Hattrup is the filing date, May 23, 2003. The attached Declaration Under 37 C.F.R. 1.131 established that Applicant invented the subject matter of rejected Claims 1-23 at least as early as July 12, 2002. The Declaration states that Steve Justiss, an employee of Crossroads Systems, Inc. is an original joint inventor of the invention described in the present Application. The Declaration further states that as early as July 12, 2002, Robert Sims and Steve Justiss conceived the invention of the present Application. A copy of an invention disclosure form evidencing conception at least as early as July 12, 2002 is attached as Exhibit A. The Disclosure further states that Mark Berrier of Gray Cary sent Steve Justiss a letter including a draft application describing the present Application on February 21, 2003 and that the application was filed on August 7, 2003. A copy of the February 21, 2003 letter is also attached hereto as Exhibit B. Applicants therefore respectfully submit that the date of invention of the present application was prior to the effective date of the Hattrup reference.

Claims 1-10 and 23

Claims 1-10 and 23 stand rejected as obvious over U.S. Publication No. 2004/0243736 ("Hattrup") in view of U.S. Patent No. 6,892,199 ("Hong "). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, the Examiner must show: that the prior art references teach or suggest all of the claim limitations and that there is some suggestion or motivation in the references (or within the knowledge of one of ordinary skill in the art) to modify or combine the references and that there is a reasonable expectation of success

of such combination. M.P.E.P. 2142, 2143; In re Vaeck, 947 F. 2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). The Applicant respectfully points out that the Examiner has failed to establish a prima facie case of obviousness. More specifically, the Examiner has not shown that each of the claim limitations is present in the references.

Claim 1 includes reading a log, wherein the log identifies a sequence in which blocks of data corresponding to multiple threads are stored on a sequential storage device; identifying at least a portion of the blocks of data corresponding to one of the threads from the log; and indexing to the location of the identified portion of the blocks of data in the sequence in which blocks of data corresponding to multiple threads are stored on the sequential storage device according to the log. Thus, according to Claim 1, the present invention can use the log identify where blocks of data corresponding to a thread are stored and index to the locations of the identified blocks of data. Thus, the index can provide the locations of data blocks for a particular thread. This can allow that thread to be efficiently reconstructed during recover. Independent Claim 23 contains similar limitations.

Hattrup

The Examiner stated that "Hattrup does not explicitly teach a multithreaded backup approach to data storage or creating a log to store stored data information." Thus, the Examiner acknowledged that these features of the present invention are not found in Hattrup.

Hong

Hong discloses a method for inserting data records from multiple clients into a database. Data records from multiple buffers are merged into a single stream of records before being written to the database. *See,* Hong Col. 8, Lines 22-27. An index can be created for the merged records before they are written to the database. *See,* Hong Col. 3, lines 15-18; Col. 6, lines 44-49). Thus, Hong discloses a method for merging records from multiple clients into a single stream of records, creating an index for the records, and writing the records to a database.

Although there is no specific description of the index in Hong, one of ordinary skill in the art would understand that an index and index file in database applications provide a mechanism

for indexing data records by key. As stated in Attachment C, the index file "allows records in the data file to be accessed by key value, rather than searching record by record." There is nothing in Hong that indicates that the index file is other than a standard index file and the background section of Hong supports that the index file is standard index file stating that building indexes for databases is known in the art. *See,* Hong Col. 1, Lines 36-38.

In Hong, records are merged from the various sources into a semi-sorted record stream. *See,* Hong Col. 5, Lines 37-40. The semi-sorted record stream is stored in one or multiple data files. *See,* Hong Col. 6, Lines 35-43. The index is built for the merged data in the single or multiple files containing the merged data. *See,* Hong Col. 6, Lines 43-49. Thus, the index file appears to simply index records and keys for the data that has already been merged, without regard to from where the data originally came. There is no teaching in Hong that the system of Hong uses the index to identify records corresponding to an initial (i.e., pre-merged) record stream. Moreover, there is nothing in Hong that suggests that the index file "identifies a sequence" in which the records are stored. Furthermore, the index file of Hong appears to correlate keys to data records, not blocks of data. Consequently, Hong fails to teach or suggest a log that "identifies a sequence in which blocks of data corresponding to multiple threads are stored on a sequential storage device" and that allows for "identifying at least a portion of the blocks of data corresponding to one of the threads from the log" (emphasis added). Applicants therefore respectfully submit that the cited references do not show each of the features of Claim 1, or Claim 23.

Dependent Claims 2-9

Claims 2-9 depend, either directly or indirectly, from Claim 1 and are patentable as containing further limitations on a patentable claim. Consequently, Applicant respectfully requests the withdrawal of the rejection of these Claims as well.

Independent Claims 11 and 16 — Not All Limitations Disclosed

Independent Claim 11 is a method claim which contains limitations similar to those of Claim 1, including storing blocks of data corresponding to multiple threads on a sequential

storage device in an intermingled fashion and recording the order in which the blocks of data are stored in a log. Independent Claim 16 is a system claim with similar limitations. Again, there is no teaching or suggestion in Hong that the standard index file does anything other than index keys to the records containing those keys. Applicants respectfully request that the Examiner point out where Hong shows "recording the order in which the blocks of data are stored in a log" as opposed to simply storing an index of which records contain which keys. Otherwise, Applicants respectfully request allowance of Claims 11 and 16.

Dependent Claims 12-15 and 17-22

Claims 12-15 and 17-22 depend, either directly or indirectly, from Claims 11 or 16 and are patentable as containing further limitations on patentable claims. Consequently, Applicant respectfully requests the withdrawal of the rejection of these Claims as well.

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-23. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

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